



# Kentucky Geologists

Volume 10 Issue 1

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## Mission

The mission of the Board of Registration for Professional Geologists is to regulate the public practice of geology in the Commonwealth of Kentucky to protect the citizens of the Commonwealth from negligent, incompetent, or fraudulent practices.

## Board

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As an agency of the Commonwealth of Kentucky, the Kentucky Board of Registration for Professional Geologists is solely funded by applicants and credential holders, and receives no tax dollars.

## Stephen Wyatt appointed to Board

Stephen R. Wyatt, P.E., P.L.S., was appointed to the Board of Registration for Professional Geologists by Governor Steve Beshear for a term expiring July 11, 2011. Mr. Wyatt represents the public-at-large (open only to non-geologists) and his appointment replaces Robert E. Fox, whose term has expired. This position is intended for non-geologists who have a rounded perspective to bring to the board. We are pleased to have Steve join us. Steve has both background in areas related to geology (e.g. underground storage tanks) and experience in state government.

Originally from Marshall County in Western Kentucky, Mr. Wyatt has lived in Central Kentucky since graduating in 1975 from the University of Kentucky College of Engineering with a B.S. in Agricultural Engineering. He is trained in the OSHA requirements for construction, confined spaces, floodplain surveys, wetland delineation, preventative maintenance programs, heating ventilating and air conditioning and boiler maintenance, and has completed Kentucky Housing Buildings and Construction workshops on Kentucky building code, underground storage tank removal, and swimming pool operations.

Mr. Wyatt has over 30 years of engineering experience in design and project management. He served 19 years with the Kentucky Department of Parks in the Design Division as chief engineer and in the Construction Division as assistant director. He served for five years as a chief engineer and office manager with the civil engineering firm W.H. Brown and Associates. In addition, he has six years of experience as an environmental engineer with the Kentucky Natural Resources and Environmental Protection Cabinet. At present, Mr. Wyatt operates a small consulting engineering firm in



*Stephen Wyatt, P.E., P.L.S.*

Lexington that offers design services for commercial site development, recreational developments, and swimming pool facilities.

Mr. Wyatt is registered in Kentucky as a professional engineer and a professional land surveyor and is a certified aquatics facility operator. He is currently the treasurer of the Kentucky Rails to Trails Council and a cycling instructor for the League of American Bicyclists. He is a past president and secretary of the Bluegrass Cycling Club and past member of the board of directors of the Kentucky Bike Coalition. Mr. Wyatt is a member of the Kentucky Association of Professional Surveyors. He resides in Lexington with his family.

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**Welcome  
New Registrants!**  
**Professional Geologists**

**12/04/2007:**

Wilhoit, Jack C. (KY)

**12/06/2007:**

Kreeger, David M. (MI)  
Stephens, Joseph (IN)  
Wilson, David Blake (IN)

**12/07/2007:**

Iordache, Liviu M. (IL)

**12/12/2007:**

Andrews, Marsha (AL)

**01/24/2008:**

Spagna, Steven S. (WV)

**05/06/2008:**

Brackman, Thomas B. (KY)  
Calderone, Gina (ME)  
Cumming, Lydia (OH)  
Hall, Christopher K. (OH)  
Hirano, Takeshi (OH)  
Hulseapple, Scott M. (NY)  
McPherson, Brent A. (OH)  
Rohrbough, Patrick W. (KY)  
Watkins, Bret Orton (KY)  
Wilson, Kevin Randall (MI)

**05/08/2008:**

Williamson, Steven C. (OH)

**Geologists-in-Training**

**12/07/2007:**

Luckett, Jason Michael (KY)

**05/06/2008:**

Marin, Cornelia Lidia (MD)  
Pinguely, Ryan Walter (KY)

**05/08/2008:**

Thompson, Samuel P. (KY)

**Total registrants**

1540 Professional Geologists  
11 Geologists-in-Training

**Calendar**

**Board Meetings  
Tentative 2008 Schedule**

June 2

August 4

October 6

December 1

**Time:** 1:30 p.m.

**Location:**

Div. of Occupations & Professions  
911 Leawood Drive  
Frankfort, Kentucky

*Note: Dates are subject to change. Please call the Board office, if you plan to attend.*

**2008**

**Exam date**

10/03/2008

03/06/2009

**Application deadline**

8/04/2008

12/30/2008

**ASBOG 2008 Annual Meeting**

October 28 – November 2  
Chicago, IL

**Council on Examiners  
Workshops**

October 29 – 30 Chicago, IL

**Board Actions**

**Complaint review report**

Every complaint that has come before the Board in 2007 has been investigated. At this time, one complaint is under investigation to determine whether there is an apparent violation of the law.

**Board legal actions**

No actions were finalized since the last announcements.

**Licensee disciplinary actions**

No actions were finalized since the last announcements.

**ASBOG exam results**

October, 2007

	Pass	Fail	% Pass
<b>Fundamentals</b>	10	5	66.7
<b>Practice</b>	8	4	66.7



**Thank you !!**

A sincere thank you to both Robert Fox and Michael Sanders for their many hours of faithful service on the Kentucky Board of Registration for Professional Geologists.

Robert Fox steps down after 8 years of service as the public-at-large representative. Mr. Fox brought a great range of experience to the board from his work as a consulting oil and gas geologist. He participated in the examination portion of annual ASBOG national conference for three years, working to ensure that the examination is both fair and accurate.

Michael Sanders has resigned from his position as board chairman. Mr. Sanders served on the board since 2002 and has represented the board at the business portion of the annual ASBOG national conference. Mr. Sanders brought leadership skills and insights to the board as a consulting oil and gas geologist.

## Career guidance in geosciences at UK

*by Dave Moecher, PhD, Assoc. Professor & Director of Undergraduate Studies, Univ. of Kentucky, Dept. of Earth and Environmental Sciences*

UK is a big place. Although it significantly improved its career guidance capabilities by establishing the Stuckert Career Center, UK can't provide career counseling for all majors to the same extent. It's simply a matter of scale. There are far more business or engineering majors than there are geology majors. There is more demand for graduates in business and engineering than in the public or private energy and environmental fields, so the former fields do most of the active campus recruiting. Thus, I feel obligated to help prepare our geology majors as much as possible for life after the B.A. or B.S. As Director of Undergraduate Studies, I usually work individually with students on career-related issues, either formally during biannual advising conferences, or informally on a drop-in or as-needed basis. However, I found myself repeating the same material to dozens of students, and had to devise a more efficient system to disseminate career advice.

### Orientation to geoscience

In Spring 2006, we instituted a new course requirement for all geology majors: GLY 295 "Orientation to Geoscience," a 1-credit, pass-fail course that meets once a week for an entire term. I serve more as course coordinator than instructor. Our students have me as an instructor in many courses (too many?), so the last thing they need, and I want, is for me to lecture them about careers. So I invite and schedule guest speakers from a variety of geoscience fields in the public and

private sectors, and let *them* do the teaching! There aren't many requirements – the point of the course is to be informative. Attendance is mandatory. We also require students to join a professional organization of their choosing, and they are required to prepare a resume.

There are several goals for this course. The first goal is to inform students of the rich variety of career paths one can take with a geology degree. Guest speakers emphasize the broad perspective that geologists bring to the table in public or private sector fields where a multidisciplinary approach to problem-solving is necessary. Speakers also serve as role models and potential mentors for students. Rather than introduce speakers, I ask each guest to describe in their own words their path to a career and the circumstances that got them to where they are today. The speakers were in the shoes of our current students 10 to 30 years ago, filled with uncertainty and anxiety about their futures. Many tried and some failed at first, but eventually landed in successful positions.

### Alumni speaking opportunities

Orientation to geosciences takes advantage of our extensive network of alumni working within a spectrum of careers. To the extent possible, I populate the schedule with alumni of our department. Most of those alumni had a meaningful experience at UK, and their success reflects, in part, on our department. Students sense the strong bond between alumni and UK, thus planting the seed for growth of a supportive alumni base. Class topics and speakers in 2008 are listed in Table 1 (see pg. 4).

### Alumni recruiting opportunities

We also attempt to maintain a recruiting pipeline with alumni in the oil and gas industry. Tom Spalding



*Dave Moecher, PhD, Associate Professor & Director of Undergraduate Studies, UK*

(V.P., Pioneer Natural Resources, Dallas, TX), has interviewed students at UK twice in the past three years and hired some of them as interns or in full-time positions. John Kaldy visited the Department twice in the past two years to discuss careers with BP-Amoco. Tim Elam of Chevron summarized the oil and gas history of California at our alumni weekend last fall. Luminant (formerly TXU Power, the largest coal and energy producer in Texas) sent three recruiters in February (including UK Geology Alumna Carolyn Sexton) to recruit for summer interns. Some of our invited Rast-Holbrook seminar speakers also offer informal brown-bag presentations on their professional fields. Jon Muntean (Nevada Bureau of Mines) is a mentor for the Society of Economic Geologists and in Fall 2007 discussed career opportunities in hard rock mining (there are lots!).

### UK employment and research opportunities

Finally, we are fortunate at UK to have part-time job and research opportunities available at the Center for Applied Energy Research. Dr. Jim Hower has employed numerous undergraduate students, some of whom have carried out award-winning research and gone on to graduate school or successful professional careers. The KGS is another great resource for students at UK. For example, Kevin Wentz (Table 1) began working part time at the KGS,

*Continued on page 4.*

*Career guidance*  
*Continued from page 3.*

moved into a permanent position with the Geospatial Data Branch, and then moved on to the Lexington-Fayette County Division of Engineering, where he has employed some of our students part time.

Networking and regular communication with alumni are the keys to maintaining momentum. We do our best, within the time constraints imposed by teaching and research at Kentucky's flagship University, to help our students begin a rewarding career in geology. We invite you to join with us in educating and training Kentucky's future geologists!

Heath, C.P.M., 2003, Geological, geophysical, and other technical and soft skills need by geoscientists in the North American petroleum industry. Am. Assoc. Pet. Geol. Bull., v. 87, p. 1395-1410.

## **New joint UK-EKU AAPG student chapter formed**

In 2007 a joint student chapter of the American Association of Petroleum Geologists (AAPG) was formed by the Department of Earth and Environmental Science at the University of Kentucky and the Department of Geography and Geology at Eastern Kentucky University. Membership is free, and is open to both undergraduate and graduate students at the two schools. Activities during the academic year include monthly meetings, and field trips. We hope to have several professional geologists attend the meetings each year to relate their experience and knowledge to help students prepare for an energy career. Energy-related field trips in the spring and fall will provide unique opportunities for the students to visit professional geologists "on the job."

If you are interested in sharing your professional experience with Kentucky's future geologists, or would like to host a group trip to your field operation, please contact David Harris, advisor for the Bluegrass Student Chapter of AAPG, Kentucky Geological Survey at 859-257-5500 (ext. 175) or [dcharris@uky.edu](mailto:dcharris@uky.edu).

## **International Pittsburgh Coal Conference**

**Sept. 29 - October 2  
2008**

**Westin Convention Ctr.  
Pittsburgh, PA**

**2009**

## **Society for Mining, Metallurgy, & Exploration**

### **Annual Meeting**

**22 - 25 February 2009**

**Denver CO**

**Table 1. GLY 295 class topics and speakers in 2008.**

<b>Topic</b>	<b>Content</b>	<b>Speaker</b>
Nontechnical skills for success	Article by Heath (2003) on professional preparation for the petroleum industry, but includes a list of non-technical skills that employers seek.	Dr. Dave Moecher, Director of Undergraduate Studies, UK Dept. EES
Graduate school	Why consider it, how to prepare	Dr. Sue Rimmer, Director of Graduate Studies, UK Dept. EES
US Geological Survey	Careers in the federal public sector	Chuck Taylor*, Geologist, USGS, Louisville, KY
KGS and state geological surveys	Their roles and careers	Dr. Jim Cobb, State Geologist of Kentucky
Environmental consulting	The nature of the business	Steve Sullivan*, CFO, The Corradino Group, Louisville
Professional organizations	Why you need them; why they need you	Dr. William Thomas*, Chair UK Dept. EES and past-President, Geological Society of America
Employment agency	Careers in coal geology	Mr. Rusty Ashcraft*, P.G. Alliance Resources Partners, Lexington, KY
UK Stuckert Career Center	Career counseling services	Jamie Johnson, Arts & Sciences Career Counselor
Environmental law	Role of a geologist	Martha Brock*, Attorney, US EPA, Atlanta, GA
Petroleum exploration	From the World's energy capital	Mike Currie*, Geophysicist, Newfield Corp., Houston, TX
		Jill (Krukoski) Gregory, ExxonMobil, Houston, TX
		Cara Kiger, I-O Corporation, Houston, TX
State public sector	Career opportunities	Peter Goodman*, Head KY Env. Protection Cabinet, Groundwater Division, Frankfort
Environmental consulting	Science aspects of consulting	Karen Thompson*, Geologist, Scott Smith Associates, Lexington
Oil and gas industry	Role of the independent producer	Tommy Cate, Greensburg Oil, LLC
Local government	Geoscience careers	Kevin Wente*, Lex-Fay Urban Co. Gov't.

(\* UK alumni)

# Geologists play critical role in carbon management

by David Harris, Head, Energy and Minerals Section  
Kentucky Geological Survey

Geologists in Kentucky and across the country are playing an important role in reducing future emissions of carbon dioxide from coal-fired power plants. Increasing energy needs will require continued reliance on coal as a major energy source. Concerns about the effects of carbon dioxide (CO<sub>2</sub>) emissions on global warming will likely require managing the carbon emissions that result from coal combustion and gasification processes. Geologic storage of CO<sub>2</sub> is a developing technology that could reduce CO<sub>2</sub> released from stationary sources. Geologic storage of CO<sub>2</sub> involves subsurface injection of CO<sub>2</sub> into porous and permeable formations such as depleted oil and gas fields, coalbeds, and saline reservoirs. It is becoming an important area of expertise for professional geologists and was virtually unknown 10 years ago.

Carbon management research in Kentucky shifted into high gear when the Kentucky General Assembly passed House Bill 1 in a 2007 special session. While primarily a tax incentive package for alternative energy plants, this bill also authorized funding for research by the Kentucky Geological Survey (KGS) in the areas of CO<sub>2</sub> enhanced oil recovery (EOR), CO<sub>2</sub> enhanced gas recovery (EGR), and permanent geologic sequestration of CO<sub>2</sub>. This multi-faceted project currently involves eight geologists at the KGS. The \$5,000,000 in state funding is being administered by the Governor's Office of Energy Policy.

The goals of the project include the following:

- Identify, drill, and test deep geologic carbon storage targets in Eastern and Western Kentucky (Illinois and Appalachian Basins)
- Demonstrate the use of CO<sub>2</sub> in enhanced oil and gas recovery in Kentucky
- Test the concept of using the Devonian Shale to store CO<sub>2</sub> while increasing natural gas production

The energy industry is partnering with the KGS to share in the cost of this important research. The Kentucky Consortium for Carbon Storage (KYCCS) has been formed to accomplish this goal. Members of this consortium will benefit from cooperative research in CO<sub>2</sub> storage that will cost a fraction of independent research programs. More information about the project is available at the KYCCS website: [www.kyccs.org](http://www.kyccs.org).

Opportunities are still available for industry partners to help guide and participate in the research. Partners can assist by providing financial contributions, expertise, access to wells and producing properties, leases and potential drilling sites, and in-kind services.

For more information please contact: David C. Harris, Head, Energy and Minerals Section, Kentucky Geological Survey, 228 Mining and Mineral Resources Bldg., University of Kentucky, Lexington, KY 40506-0107, [dcharris@uky.edu](mailto:dcharris@uky.edu), 859-257-550 ext. 175.



*David Harris, Head, Energy and Minerals Section, Kentucky Geological Survey.*

**Appalachia  
Unconventional since 1859**

**AAPG-SPE  
2008  
Eastern Meeting**

11 - 15 October 2008  
Hilton Pittsburgh

**2008  
Joint Annual Meeting  
Geological Society  
of America**

with  
SSSA, ASA, CSSA, GCAGS, HGS

**Celebrating  
the International Year  
of Planet Earth**

**5 - 9 October**

Houston TX

**Kentucky Geologists** is published semiannually by the Kentucky Board of Registration for Professional Geologists. The publication features topics relevant to the ethical practice of geology in the Commonwealth. Suggestions for the newsletter should be directed to Judith Hower, Communications Specialist, Kentucky Geological Survey, 228 Mining & Mineral Resources Building, University of Kentucky, Lexington KY 40506-0107, (859) 277-0777; FAX (859) 257-1147 <judith.hower@uky.edu>.



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